

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for re-establishing an IP protocol call signaling channel, comprising:

establishing a first call signaling channel between a first communication endpoint and a first gatekeeper, wherein said first call signaling channel provides a first set of call signaling

5 features with respect to a first bearer channel;

(call waiting)

in response to losing said established first call signaling channel, sending a keep alive message to a second gatekeeper; and

in response to receiving a registration confirmation message from said second gatekeeper in reply to said keep alive message, establishing a second call signaling channel with said second

10 gatekeeper, wherein said second call signaling channel provides said first set of call signaling

features with respect to said first bearer channel and effectively re-establishes said first call signaling channel.

(counting)
(col. 10) 49-50

What I'd like to say about

The

My request is consider as a lightweight request

2. (Previously Presented) The method of Claim 1, wherein said keep alive message
15 comprises a lightweight registration request.

3. (Currently Amended) The method of Claim 1, wherein said step of sending a keep alive message to ~~an alternate~~ a second gatekeeper in response to losing said established first call signaling channel comprises sending a keep alive message to a plurality of alternate gatekeepers, and wherein said step of establishing a second call signaling channel comprises

5 establishing a call signaling channel with a one of said alternate gatekeepers.

4. (Currently Amended) The method of Claim 1, further comprising:

in response to receiving no registration confirmation message from said ~~alternate~~ second gatekeeper within a first time period, re-registering with a gatekeeper.

10

5. (Previously Presented) The method of Claim 1, further comprising establishing a bearer channel between said first communication endpoint and a second communication endpoint, wherein said call signaling channel carries data related to at least one of control of and features associated with data transferred between said first and second communication endpoints

5 by said bearer channel.

6. (Currently Amended) The method of Claim 1, wherein said first communication endpoint comprises a telephony device.

10

7. (Previously Presented) The method of Claim 1, wherein said call signaling channel is established according to an ITU-T H.323 protocol.

8. (Currently Amended) A communication system, comprising:

a first communication endpoint, operable to at least one of receive data from and provide data to an Internet protocol network;

5 a first gatekeeper, operable to control aspects of operation of a communication endpoint in communication with said first gatekeeper;

a first communication link between said first communication endpoint and said first gatekeeper, wherein said first communication link provides a first call signaling channel in support of a first realtime communication; ()

10 a second gatekeeper, operable to control aspects of operation of a communication endpoint in communication with said second gatekeeper; and

a second communication link between said first communication endpoint and said second communication gatekeeper, wherein said second communication link is established after said first communication link is lost and after an exchange of a lightweight RRQ message and an RCF message between said first communication endpoint and said second communication gatekeeper,

15 wherein said second communication link provides a second call signaling channel that replaces said first call signaling channel, wherein said first realtime communication formerly supported by said first call signaling channel is supported by said second call signaling channel after said first communication link is lost. ()

Cal - time

20 9. (Previously Presented) The system of Claim 8, further comprising:

a second communication endpoint; and

a third communication link, wherein said third communication link is established

Application Serial No. 10/660,938

between said first and second communication endpoints.

10. (Previously Presented) The system of Claim 8, wherein said first communication endpoint comprises a telephony device.

5

11. (Previously Presented) The system of Claim 10, wherein said telephony device comprises at least one of an IP telephone, a soft telephone, a videophone, and a soft videophone.

12. (Previously Presented) The system of claim 8, wherein said first communication
10 endpoint comprises a gateway.

13. (Previously Presented) The system of Claim 8, wherein said first communication endpoint comprises a first gateway and at least a first telephony device interconnected to said gateway.

15

14. (Previously Presented) The system of Claim 8, wherein said first communication endpoint comprises memory operable to store an address of said second communication gatekeeper.

15. (Currently Amended) A computational component computer-readable medium
encoded with a computer program for performing a method, the method comprising:

Search note -

112 1st written Description Rejected

Application Serial No. 10/660,938

registering an endpoint with a first gateway, wherein a first signaling link that supports a first bearer channel comprising a realtime communication is established between said endpoint and said first gateway; and

in response to a loss of said first signaling link, sending a lightweight registration request

5 (RRQ) message to a second gateway; and

in response to receiving a registration confirmation message from said second gateway,

establishing a second signaling link between said endpoint and said second gateway, wherein

said second signaling link supports said first bearer channel comprising a realtime

communication. < J

Same
as 15
10

16. Canceled.

17. (Previously Presented) The method of Claim 15, further comprising:

in response to receiving a registration rejection message, sending a lightweight RRQ

15 message to a third gateway.

18. (Previously Presented) The method of Claim 15, further comprising:

sending a lightweight RRQ message to a third gateway.

20 19. Canceled.

20. (Previously Presented) The method of Claim 15, wherein said computational component comprises a logic circuit.

21. (Currently Amended) A communication system endpoint, comprising:
means for communicating with a first means for controlling aspects of an exchange of data in realtime between said communication system endpoint and a second communication system endpoint;

5 means for generating a lightweight RRQ message in response to a loss of a communication link between said means for communicating and said first means for controlling aspects of an exchange of data between said communication system endpoint and a second communication system endpoint; and

means for interconnecting said at least a first communication system endpoint means and
10 said first means for controlling aspects of an exchange of data between said communication system endpoint, wherein a first call signaling channel in support of a first realtime communication is established.

22. (Currently Amended) The communication system endpoint of Claim 21, further
15 comprising:

means for storing a list of alternate means for controlling aspects of an exchange of data between said communication system endpoint and a second communication system endpoint, wherein said means for generating a lightweight RRQ message addresses said lightweight RRQ

Application Serial No. 10/660,938

message to a ~~one~~ second of said alternate means for controlling, wherein a second call signaling channel is established.

23. (Currently Amended) The communication system of Claim 21, further comprising:

means for storing a list of alternate means for controlling aspects of an exchange of data
5 between said communication system endpoint and a second communication system endpoint,
wherein said means for generating a lightweight RRQ message addresses a lightweight RRQ
message to a plurality of said alternate means for controlling.

DETAILED ACTION

Claim Objections

Claims 3, 17, 18, 22, 23, are objected to because of the following informalities:

In claim 3 line 4 "a keep alive message" should be replaced by –the keep alive message — in order to improve the clarity of the claim language.

In claim 17 line 2 " a lightweight RRQ message" should be replaced by – the lightweight RRQ message --- in order to improve the clarity of the claim language.

In claim 18 line 2 " a lightweight RRQ message" should be replaced by – the lightweight RRQ message --- in order to improve the clarity of the claim language.

In claim 22 line 2 applicant should remove "said" from "said means for generating addresses" in order to improve the clarity of the claim language.

In claim 23 line 3 " a lightweight RRQ message" should be replaced by – said lightweight RRQ message --- in order to improve the clarity of the claim language.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

112 1st
written description
doesn't have enough detail
in the description
interpret it
as best as Examiner
can understand it.
then give an example
of the interpretation of the claim

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15, 21, 22 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21, 22, and 23 recites the limitation "means for controlling" It is unclear and confusing to what is being controlled. Applicant should change to ---means for controlling containing a means for controlling---.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 15-18 are rejected under U.S.C. 101 because the claimed invention is

~~directed to non-statutory subject matter.~~

Independent claim 15 is drawn towards " a computational component for performing a method, the method comprising registering an endpoint with a first gateway, wherein a first signaling link is established between said endpoint and said first gateway; and in response to a loss of said first signaling link, sending a lightweight registration request (RRQ) message to a second gateway." In addition to, base on 35 U.S.C.101, the Supreme Court has specifically identified four categories of non-statutory subject

*15 101
what can you encode a medium into a program.*

Art Unit: 2154

matter: which are process, machine, manufacture, composition of matter. In this instant case, claim 15 is classified as being functional descriptive material. Similarly, computer programs claimed as computer listings per se, the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permits the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.

Claims 16-18, which are dependent on claim 15, are rejected for the same.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6,8,9,10,12-23 are rejected under 35 U.S.C. 102 (b) as being anticipated by
Ton (US 6,771,623).

Applicant is

H. ~~232~~ 323 protocol several meanings of the
the claim doesn't specify the type
to 323
protocol

Referring to claim 1, Ton discloses a method for re-establishing an IP protocol call
signaling channel, comprising: establishing a first call signaling channel between a first
communication endpoint i.e. mobile node and a first gatekeeper i.e. home agent (Col.4
lines 5-7); in response to losing i.e. roaming said established first call signaling channel
(Col.1 lines 13-17), sending a keep alive message i.e. registration request to a second
gatekeeper i.e. home agent 2 (Col. 4 lines 19-30) (abstract lines 26-30); in response to receiving a
registration confirmation message i.e. MIP registration message from said second
gatekeeper, establishing a second call signaling channel with said second gatekeeper
(abstract lines 13-16).

Referring to claim 2, Ton discloses all the limitations of claim 2 which are described
above Ton also discloses "keep alive message comprises a lightweight registration
request" (Col.4 lines 26-30).

Referring to claim 3, Ton discloses all the limitations of claim 3 which are described
above. Ton also discloses " step of sending keep alive message to an alternate
gatekeeper in response to losing said established first call signaling channel comprises
sending keep alive message to a plurality of alternate gatekeepers i.e. home agent 1,
home agent 2, and wherein said step of establishing a call signaling channel comprises

establishing a call signaling channel with a one of said alternate gatekeepers (Col. 5 lines 26-30).

Referring to claim 4, Ton discloses all the limitations of claim 4 which is described above. Ton also discloses "in response to receiving no registration confirmation message i.e. error code from said alternate gatekeeper i.e. home agent 2 within a first time period re-registering with a gatekeeper i.e. home agent 2." (Col.6 lines 47-53)

Referring to claim 5, Ton discloses all the limitations of claim 5 which is described above. Ton also discloses establishing a bearer channel between said first communication endpoint i.e. mobile node and a second communication endpoint i.e. foreign agent (Col.2 lines 3-5), wherein said call signaling channel carries data related at one of control of features associated with data transferred between said first and second communication endpoints by said bearer channel i.e. IP-in IP tunnel (Fig.2)

Referring to claim 6, Ton discloses all the limitations of claim 6 which is described above. Ton also discloses, "wherein said communication endpoint comprises a telephony device."(Col. 1 lines 28-30).

Referring to claim 8, Ton discloses a communication system, comprising: a first communication endpoint i.e. mobile node, operable to at least one of receive data from and provide data to an Internet protocol network (Col.4 line 4-8); a first gatekeeper i.e.

Art Unit: 2154

home agent, operable to control aspects of operation of a communication endpoint in communication with said first gatekeeper (Col.3lines 10-15), a first communication link between said first communication endpoint and said first gatekeeper (Col.6, Fig.2 lines 50-58); a second gatekeeper, operable to control aspects of operation of a communication endpoint in communication with said gatekeeper (Col. 4 lines 33-37); and a second communication link between said first communication endpoint and said second communication gatekeeper(Col 9. lines 34-42), wherein said second communication link is established after said first communication link is lost and after an exchange of a lightweight RRQ message and RCF message between said first communication endpoint and said second communication gatekeeper (Col. 9 lines 50-53).

Referring to claim 9, Ton discloses all the limitations of claim 9, which is described above. Ton also discloses a second communication endpoint i.e. home agent; and a third communication link, wherein said third communication link is established between said first and second communication endpoints (Col.5 lines 57-63).

Referring to claim 10, Ton discloses all the limitations of claim 10 which is described above. Ton also discloses, "wherein said first communication endpoint comprises a telephony device." (Col. 1 lines 28-30).

Art Unit: 2154

Referring to claim 12, Ton discloses all the limitations of claim 12, which is described above. Ton also discloses wherein said first communication endpoint i.e. mobile node comprises a gateway i.e. foreign agent (Col. 1 line 67 and Col.2 line 1-3).

Referring to claim 13, Ton discloses all the limitations of claim 13, which is described above. Ton also discloses wherein said first communication endpoint comprises a first gateway and at least a first telephony device interconnected to said gateway (Col.1 line 67 and Col.2 line 1-3).

Ton
* Referring to claim 14, ~~Sengodan~~ discloses all the limitations of claim 14, which is described above. *Ton* ~~Sengodan~~ also discloses wherein said first communication endpoint i.e. mobile node comprises memory operable to store an address of said second communication gatekeeper i.e. home agent 2. (Col. 6 lines 25-32).

Referring to claim 15, Ton discloses the limitations of a computational component for performing a method, the method comprising: Registering an endpoint i.e. mobile node with a first gateway i.e. home agent (Col. 5 lines 64-65), wherein a first signaling link is established between said endpoint and said first gateway (Fig 2. 550 MIP registration request); sending a lightweight registration request (RRQ) message to a second gateway i.e. foreign agent (Col. 6 lines 41-45).

Art Unit: 2154

Referring to claim 16, Ton discloses all the limitations of claim 16 which is described above. Ton also discloses in response to receiving a registration confirmation message from said second gateway i.e. foreign agent (Col. 9 lines 65-67), establishing a second signaling like between said endpoint i.e. mobile node and said second gateway i.e. foreign agent (Fig. 5 590 MIP registration reply)

Referring to claim 17, Ton discloses all the limitations of claim 17 which is described above. Ton also discloses in response to receiving a registration rejection message (Col.6 lines 47-53), sending a lightweight RRQ message to a third gateway. (Col. 6 lines 41-45)

Referring to claim 18, Ton discloses all the limitations of claim 18 which is described above. Ton also discloses sending a lightweight RRQ message to a third gateway (Col. 6 lines 41-45).

Claim 19 is likewise rejected using the same reasoning and citations for claim 15 since they recite identical limitations and are distinguished only by statutory category.

Referring to claim 20, Ton discloses all the limitations of claim 20 which is described above. Ton also discloses wherein said computational component comprises a logic circuit (Col.2 lines 6-9).

Art Unit: 2154

Referring to claim 21, Ton discloses a communication system endpoint, comprising: means for communicating with means for controlling aspects of an exchange of data between said communication system endpoint and a second communication system endpoint (Col.3lines 10-15); means for generating a lightweight RRQ message in response to a loss of a communication link between said means for communicating and said means for controlling; and means for interconnecting said at least a first communication endpoint means and said means for controlling (Col. 9 lines 50-53).

Referring to claim 22, Ton discloses the limitations of claim 22 which is described above. Ton also discloses generating addresses said lightweight RRQ message to a one of said alternate means for controlling (Col. 5 lines 43-45)

Claim 23 is likewise rejected using the same reasoning and citations for claim 22 since they recite identical limitations.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Ton (US 6,771,623) in view of Craig (US 6,930,999 B1).

Referring to claim 7, Ton discloses all the limitations of claim 7 which is described above. Ton did not disclose, "wherein said call signaling channel is established according to an ITU-T H. 323 protocol". The general concept of "wherein said call signaling channel is established according to an ITU-T H. 323 protocol" is well known in the art taught by Craig. Craig discloses, "wherein said call signaling channel is established according to an ITU-T H. 323 protocol"(Abstract lines 1-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ton to include "wherein said call signaling channel is established according to an ITU-T H. 323 protocol" in order to have a reliable channel to convey the call setup and teardown messages.

Claim 11 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Ton (US 6,771,623) in view of Tsutsumi (US 6,904,277 B2).

Referring to claim 11, Ton discloses all the limitations of claim 11, which is described above. Ton does not disclose, "wherein said telephony device comprises at least one of an IP telephone, a soft telephone, a videophone, and a soft videophone." The general concept of having wherein said telephony device comprises at least one of an IP

Art Unit: 2154

telephone, a soft telephone, a videophone, and a soft videophone is taught by Tsutsumi. Tsutsumi discloses said telephony device comprises at least one of an IP telephone, a soft telephone, a videophone, and a soft videophone (Col. 1 lines 60-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ton to include said telephony device comprises at least one of an IP telephone, a soft telephone, a videophone, and a soft videophone in order for communication to be carried out.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashley d. Turner whose telephone number is 571-270-1603. The examiner can normally be reached on Monday thru Friday 7:30a.m. - 5:00p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-270-2603.

Art Unit: 2154

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner:

Supervisory Patent Examiner

Ashley Turner

Nathan Flynn

Date: _____

Date: _____

